



**QUEEN'S
UNIVERSITY
BELFAST**

Ecosystem Services and the Rural Environment: Reforming European Agricultural Law

Jack, B. (2012). Ecosystem Services and the Rural Environment: Reforming European Agricultural Law. *European Energy and Environmental Law Review*, 21(6), 258-273.

Published in:
European Energy and Environmental Law Review

Document Version:
Publisher's PDF, also known as Version of record

Queen's University Belfast - Research Portal:
[Link to publication record in Queen's University Belfast Research Portal](#)

Publisher rights
© 2012 Kluwer Law International

General rights
Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.

European

Energy and

Environmental

Law Review



Wolters Kluwer
Law & Business

Published by Kluwer Law International
P.O. Box 316
2400 AH Alphen aan den Rijn
The Netherlands

Sold and distributed in North, Central and South
America by Aspen Publishers, Inc.
7201 McKinney Circle
Frederick, MD 21704
United States of America

Sold and distributed in all other countries
by Turpin Distribution
Pegasus Drive
Stratton Business Park, Biggleswade
Bedfordshire SG18 8TQ
United Kingdom

ISSN 0966-1646
© 2012, Kluwer Law International

This journal should be cited as:
(2013) 22 EEELR

The European Energy and Environmental Law
Review is published 6 times per year.
Subscription prices for 2013 [Volume 22, Numbers 1
through 6] including postage and handling:
Print subscription prices: EUR772/USD1030/GBP568
Online subscription prices: EUR715/USD953/
GBP525 (covers two concurrent users)

This journal is also available online at
www.kluwerlawonline.com. Sample copies and
other information are available at
www.kluwerlaw.com. For further information at
please contact our sales department at
+31 (0) 172 641562 or at sales@kluwerlaw.com.

For Marketing Opportunities, please contact
marketing@kluwerlaw.com

All rights reserved. No part of this publication may
be reproduced, stored in a retrieval system, or
transmitted in any form or by any means,
mechanical, photocopying, recording or otherwise,
without prior written permission of the publishers.

Permission to use this content must be obtained
from the copyright owner. Please apply to:
Permissions Department, Wolters Kluwer Legal,
76 Ninth Avenue, 7th floor, New York, NY 10011,
United States of America.
E-mail: permissions@kluwerlaw.com.

Printed on acid-free paper

Managing Editors **Kurt Deketelaere**
Katholieke Universiteit Leuven

Zen Makuch
Imperial College London

Associate Editors **Bram Delvaux**
Katholieke Universiteit Leuven

Marijke Schurmans
Katholieke Universiteit, Leuven

Editorial Advisory Board **Lucas Bergkamp**
Hunton & Williams LLF, Brussels
Erasmus University, Rotterdam

Michael Faure
Maastricht University

Stephen Stec
Regional Environmental Center for Central and Eastern Europe (REC) Country Office,
Hungary

Book Reviews Editor **Karen Makuch**
Imperial College London

European Energy and Environmental Law Review The European Energy and Environmental Law Review invites the submission of unsolicited articles from scholars, practitioners and students of energy and environmental law. The Editors are willing to consider proposals for articles but is unable to make any commitment as to publication prior to submission of the final script. Book reviews are also welcome. Letters in response to articles can only be considered for publication if they do not exceed a maximum of 500 words.

Aims and Scope European Energy and Environmental Law Review is a bimonthly journal which presents comprehensive coverage of the latest developments in energy and environmental law throughout Europe. In addition to this, European Energy and Environmental Law Review contains concise, accessible articles which explore and analyse significant issues and developments in energy and environmental law and practice throughout Europe.

European Energy and Environmental Law Review enables the reader to keep abreast of significant and topical aspects of energy and environmental law, including the legal issues relating to renewables, energy security, energy efficiency, energy competition law, energy liberalisation process, electricity and gas markets, climate change; sustainable energy, land, air, fresh water, oceans, noise, waste management, dangerous substances, and nature conservation. Its succinct, practical style makes it ideal for the busy professional, while the authority, scope, and topicality of its coverage make it an invaluable research tool.

Ecosystem Services and the Rural Environment

Ecosystem Services and the Rural Environment: Reforming European Agricultural Law

Brian Jack*

Introduction

The 10th Conference of the Parties to the Convention on Biological Diversity, meeting at Nagoya in October 2010, agreed to take “effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services.”¹ In doing so, it recognised the central role biological diversity plays in supporting a range of ecosystem services essential for human well being.² The Conference acknowledged that the parties had failed to meet a previous target of achieving significant reductions in rates of biodiversity loss by 2010.³ In reality, human impact upon diversity has been so severe that some ecologists warn that the planet is in danger of experiencing its sixth mass species extinction.⁴

The problem is no less serious in the Europe Union.⁵ As a party to the Convention on Biological Diversity, the European Union has established a target of halting biodiversity loss and the degradation of ecosystem services by 2020 and restoring these ecosystem services in so far as feasible.⁶ However, it also failed to meet its previous target of halting biodiversity loss by 2010. Today, given that 47 per cent of the land territory of the EU-27 is agricultural land,⁷ agriculture will have major influence in determining whether the new biodiversity target is achieved. In the past, the European Union’s Common Agricultural Policy (“the CAP”) acted as a catalyst, fuelling biodiversity loss and ecosystem decline through agricultural intensification.⁸ Recognition of this helped shape reforms over the last two decades. However, as the European Union’s biodiversity strategy acknowledges,⁹ efforts to integrate biodiversity protection into agricultural policy have not been sufficient. In truth environmental issues competed with other demands in these reforms, such as protecting the EU budget, responding to the liberalisation of world trade and preparing for EU enlargement.¹⁰

The Commission has published proposals for a further package of reforms, which are intended to regulate the CAP between 2014 and 2020. Environmental issues again compete with other goals. The Commission’s principal objectives are to ensure food security within the European Union and contribute towards growing world food demand, whilst enhancing the sustainable management of natural resources and maintaining rural communities.¹¹ However, the reform will have an important bearing upon whether

the European Union meets its 2020 biodiversity target and, in so doing, provides effective protection for ecosystem services. This article examines whether this is likely to be the case. It critically analyses the Commission’s proposals, questioning whether agricultural production policy will provide sufficient support for ecosystem services and then focusing on rural development policy. The article commences, however, by examining the concept of ecosystem services itself.

Adapting to an Ecosystem Based Approach

Both the Convention on Biological Diversity and the European Union’s biodiversity strategy recognise the importance of ecosystem services. This concept came to the fore with the publication of the Millennium Ecosystem Assessment (“the MEA report”), in 2005.¹² The Millennium Ecosystem Assessment was established in 2000, under the auspices of the United Nations, to “assess the consequences of ecosystem change for human well-being and to establish the scientific basis for actions needed to enhance the conservation and sustainable use of ecosystems and their contributions to human well-being.”¹³ Its report identified four categories of ecosystem services, provisioning services, regulating services, cultural services and supporting services.¹⁴ Of these, provisioning services are essentially the products humans obtain from functioning ecosystems, including food, fresh

* Lecturer at the School of Law, Queen’s University Belfast.

¹ Decision X/2 (The Strategic Plan for Biodiversity 2011-2020) Article 12, <http://www.cbd.int/decisions/cop/?m=cop-10> last accessed 17 August 2012.

² *Ibid.*, Art. 3.

³ *Ibid.*, Arts 4 and 5.

⁴ See, A. Barnosky *et al.*, “Has the Earth’s Sixth Mass Extinction Already Arrived?” [2011] *Nature*, p. 51.

⁵ See, European Academies of Science Advisory Council, *Ecosystem Services and Biodiversity in Europe* (Royal Society, 2009).

⁶ Commission Communication, “Our Life Insurance, Our Natural Capital: An EU Biodiversity Strategy to 2020” COM (2011) 244 final, p. 2.

⁷ Commission, *Rural Development in the European Union: Statistical and Economic Information Report 2011* (Commission, 2011), p. 138.

⁸ See B. Jack, *Agriculture and EU Environmental Law* (Ashgate Publishing Ltd., 2009) 21.

⁹ Commission (n 6), p. 5.

¹⁰ See B. Jack (n 8), p. 41.

¹¹ Commission, “The CAP Towards 2020- Meeting the Food, Natural Resources and Territorial Challenges of the Future” COM (2010) 672 final, p. 4-5.

¹² Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Synthesis* (Island Press, 2005).

¹³ *Ibid.*, preface.

¹⁴ *Ibid.*, p. 7.

Ecosystem Services and the Rural Environment

water and raw materials such as timber, cotton and wool. Regulating services, in contrast, concern the role ecosystems play in maintaining our environment. This incorporates a variety of roles, such as climate regulation, protecting air and water quality, pollinating crops and preventing soil erosion or flooding. Cultural services reflect the enjoyment humans receive from natural spaces and species, whilst supporting services highlight the vital role ecosystems play in providing fundamental tools, such as soil formation or water cycling, necessary for the other services to operate.

The MEA report revealed that humans had altered ecosystems more rapidly and extensively over the last 50 years than in any comparable period of human history.¹⁵ This contributed towards major improvements in human well being and economic development. However, the report concluded that, if not addressed, the consequential degradation of ecosystem services would substantially reduce these benefits for future generations.¹⁶ Assessments of the current state of ecosystem services in the European Union have been equally pessimistic.¹⁷

Ultimately, these findings are symptomatic of market failure. Ecosystem services are often positive externalities, providing benefits for the population at large but bringing little financial gain to those entrusted with their management.¹⁸ Resource owners therefore have little incentive to continue supporting them and every incentive to pursue more lucrative activities that may reduce or eliminate them. Several assessments have been made of the economic value of ecosystem services. In 1997, their total global economic value was estimated to be US \$33 trillion per annum.¹⁹ More recently, in 2011, natural pollination was estimated to be worth £430 million per annum to agriculture in the United Kingdom, whilst carbon sequestration by the United Kingdom's woodlands was valued at £680 million per annum and the water quality benefits provided by its inland wetlands was valued at up to £1,500 million per annum.²⁰ In practice, the cost of protecting and supporting the ecosystems producing these services is often less than that of introducing man-made alternatives, such as building water treatment plants to restore water quality.²¹

Initially, the CAP promoted only two ecosystem services, the production of food and of raw materials. Consequently, in the European Union and across the globe, production increases in food and raw materials have been rare exceptions to the general trend of ecosystem service decline.²² However, as the MEA report acknowledges,²³ concentration on the production of one ecosystem service usually results in the degradation of others. This has equally been true in the European Union.²⁴ In turn, as declining bee pollination appears to illustrate,²⁵ the degradation threatens the future food security of both the European Union and the international community.

The European Environment Agency ("the EEA") reports that reforms to the CAP over the last 20 years have yet to deliver clear biodiversity benefits.²⁶ It monitors trends in farmland bird and butterfly populations as barometers of farmland biodiversity.²⁷ As a result of agricultural intensification, farmland bird populations declined sharply between 1980 and 1995.²⁸ This decline is continuing, though at a slower rate.²⁹ Grassland butterfly populations have declined by 70 per cent since 1990, with no sign of this decline abating.³⁰ Equally, agricultural habitats also account for 17 per cent of the terrestrial Natura 2000 network,³¹ identified under the Wild Birds and Habitats Directives.³² Yet only seven per cent of these sites are considered to be in a favourable conservation state.³³

In contrast, both the parties to the Convention on Biological Diversity and the European Union itself recognise agriculture's importance in contributing towards their conservation goals. The parties to the Convention set a target of ensuring that by 2020

¹⁵ *Ibid.*, p. 2.

¹⁶ *Ibid.*, p. 5.

¹⁷ See European Environment Agency, *Ecosystem services in the EU* <<http://www.eea.europa.eu/themes/biodiversity/where-we-stand/ecosystem-services-in-the-eu/>> last accessed 17 August 2012.

¹⁸ See J. Ruhl, S. Kraft, C. Lant, *The Law and Policy of Ecosystem Services* (Island Press, 2007), p.63.

¹⁹ R. Costanza *et al.*, "The Value of the World's Ecosystem Services and Natural Capital" [1997] 387 *Nature* 253 at p. 259.

²⁰ UK National Ecosystem Assessment, *The UK National Ecosystem Assessment: Technical Report* (UNEP-WCMC, 2011).

²¹ P. Ten Brick (ed.) *The Economics of Ecosystems and Biodiversity in National and International Policy Making* (Earthscan, 2011), p. 28.

²² See the Millennium Ecosystem Assessment (n 12), p. 7.

²³ *Ibid.*, p. 6.

²⁴ See European Academies of Science Advisory Council (n 5), pp. 1, 20 and 27.

²⁵ See, for example, D. Goulson, "Bumblebees", in N. Maclean (ed.) *Silent Summer: The State of Wildlife in Britain and Ireland* (Cambridge University Press, 2010), p. 415.

²⁶ EEA, *10 Messages for 2010: Agricultural Ecosystems* (EEA, 2010), p. 3.

²⁷ See, EEA, *EEA Report 2/200: Integration of Environment into EU Agriculture Policy: the IRENA indicator based assessment report* (EEA, 2006), p. 26.

²⁸ *Ibid.*, p. 27.

²⁹ *Ibid.*

³⁰ EEA (n 26), p. 6.

³¹ EEA (n 27), p. 27.

³² Council Directive 2009/147 on the conservation of wild birds, [2010] OJ L20/7 and Council Directive 92/43 on the protection of natural habitats and of wild fauna and flora [1992] OJ L2006/7.

³³ EEA (n 26), p. 8.

Ecosystem Services and the Rural Environment

agricultural lands are being managed sustainably to ensure the conservation of biodiversity.³⁴ Equally, the European Union's own biodiversity strategy stipulates the following target:³⁵

By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 baseline, thus contributing to enhanced sustainable management.

The present CAP reform proposals therefore provide an opportunity to introduce measures that will have clear biodiversity benefits and which will make a significant contribution in helping the European Union to meet its objectives concerning biodiversity and the provision of ecosystem services.

Agricultural Production and Direct Payments

As a result of past reforms, CAP production policy has altered its focus from product support to providing producer support. The most visible sign of this change has been the introduction of direct payments, fully funded by the European Union. Farmers in the EU-15, plus Slovenia and Malta, currently receive Single Farm Payments, whilst the Single Area Payment operates in the other Member States.³⁶ Both primarily base payments upon the amount of land each claimant farms. However, the Single Farm Payment also enables Member States to operate hybrid schemes that also take into account factors such as livestock numbers or regional crop yields. The Commission proposals would retain direct payments as a feature of CAP production policy.³⁷ However, they suggest amalgamating the present schemes into one, "basic payment", with payments based solely on the amount of eligible land farmed.³⁸

The European Union's biodiversity strategy warns that success in achieving its objectives will depend on the availability and efficient use of financial resources.³⁹ Collectively, Single Farm Payments and Single Area Payments cost the European Union €33 billion in 2010.⁴⁰ This was almost sixty per cent of the European Union's agricultural expenditure and almost a quarter of its entire budget.⁴¹ However, the objectives served by these payments are unclear. They were originally introduced to compensate farmers for price reductions, which linked commodity prices in the European Union more closely to lower prices prevailing upon world markets.⁴² However, there have since been major increases in many global commodity prices.⁴³ They are also expected to remain high throughout the period to 2020.⁴⁴ The compensation

explanation also does not justify the extension of payments to farmers in new Member States, who did not experience the price reductions. The Commission now describes the payments as being income supports.⁴⁵ They certainly do provide important support for farm incomes in many areas. It has been suggested that this is particularly true in Denmark, Slovenia, Sweden and the United Kingdom.⁴⁶ In the United Kingdom, for example, 15 per cent of farms currently have negative incomes, a figure that would increase to nearly 60 per cent if direct payments were abolished.⁴⁷ However, direct payments are blunt instruments, providing untargeted support with no assessment of individual needs. The highest payments are currently made to farmers operating large, often intensive, farms, whilst poorer farm households, on smaller farms, receive least support.⁴⁸ The Commission proposes that no individual farmer should, in future, receive more than €300,000 in direct payments, with progressive reductions of 20, 40 and 70 per cent also being applied to farmers receiving more than €150,000, €200,000 and €250,000 respectively.⁴⁹ This may protect the European Union budget, but it would

³⁴ Decision X/2 (n 1), Art. 13, target 7.

³⁵ Commission (n 6), p. 6.

³⁶ Under Council Regulation 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy, [2009] OJ L30/16.

³⁷ Commission, "Proposal for a Regulation of the European Parliament and of the Council establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy" COM(2011) 625 final/2, Arts 18 to 22.

³⁸ *Ibid.*, Art. 21(2).

³⁹ Commission (n 6), p. 9.

⁴⁰ See, Commission, *Agriculture and the European Union: Statistical and Economic Information 2010* (Commission, 2011) table 3.4.1.

⁴¹ *Ibid.*

⁴² See, Commission, "The Development and Future of the Common Agricultural Policy" (Reflections Paper) COM (91)100 final, pp. 13-14.

⁴³ See S. Tangerman, *Direct Payments in the CAP Post 2013* (European Parliament, 2011), <http://www.europarl.europa.eu/studies>, last accessed 17 August 2012.

⁴⁴ See OECD, FAO, *Agricultural Outlook 2011-2020* (OECD, 2011).

⁴⁵ See Commission (n 11), p. 8.

⁴⁶ H. Vrolijk *et al.*, *Farm Viability in the European Union: Assessment of the Impact of Changes in Farm Payments* (Wageningen University, 2010), p. 43, <http://www.lei.dlo.nl/publicaties/PDF/2010/2010-011.pdf>, last accessed 17 August 2012.

⁴⁷ *Ibid.*

⁴⁸ See J. Ferrer, E. Kaditi, *The EU Added Value of Agricultural Expenditure: from market to multifunctionality-gathering criticism and success stories of the CAP* (Centre for European Policy Studies, undated), p. 14.

⁴⁹ Commission (n 37), Art. 11.

Ecosystem Services and the Rural Environment

not deliver improved targeting. The reductions may also never occur. Similar proposals failed to gain Member State support in 2003.⁵⁰ A parliamentary committee has already recommended that the United Kingdom should reject this proposal.⁵¹

An alternative approach would acknowledge the other ecosystem services associated with agricultural production and to use direct payments to support these services. A similar approach was advocated in 1997, in a study conducted for the Commission's Agriculture Directorate General.⁵² It recommended replacing direct payments with "environmental and cultural landscape payments", made to farmers providing environmental services. Although these proposals were not adopted, they point to an approach that reflects our knowledge of the current state and anthropogenic importance of ecosystem services. However, any attempt to re-orientate direct payments in this fashion would meet strong political resistance. Ironically, it would mainly benefit farmers on smaller, more extensive, farms and, consequently, be more compatible with the Commission's income support goals.

Greening direct payments

Instead of introducing payments for ecosystem services, the Commission proposes to add a "greening component" to the existing payment structure. To be eligible to receive the new basic payment, farmers would be required to observe any of three environmental practices relevant to their farms.⁵³ Arable farmers with more than three hectares of arable land would be required to undertake crop diversification.⁵⁴ This would involve cultivating at least three different crops, with none covering less than 5 per cent and the largest crop no more than 70 per cent of their arable land.⁵⁵ Farmers would also be required to set aside up to 7 per cent of their farmland, excluding permanent grasslands, as ecological focus areas.⁵⁶ Finally, farmers would be required to retain areas of permanent grassland on their farms.⁵⁷ Organic farmers would be exempt from these requirements; their environmental credentials already deemed sufficient to secure eligibility.⁵⁸ Farmers with Natura 2000 sites upon their land would only be required to comply in so far as this was compatible with the protection of those sites.⁵⁹ In turn, Member States would be required to use one third of their national envelope, the monies allocated to them for basic payments, to pay farmers for implementing the greening component.⁶⁰ At farm level, greening component payments would be paid at a flat rate per hectare.⁶¹ Matthews argues there is little objective basis for valuing them at one third of the total payment.⁶² The Court of Auditors suggests it is unclear to what extent this compensates farmers for the cost of complying with the greening component or of producing public goods.⁶³ Though, equally, it may be viewed as being politically motivated, by a desire to improve public perception of basic payments.

The Commission argues that crop diversification will improve the resilience of soils and of their ecosystems, whilst the establishment of ecological focus areas will protect habitats and water resources and the protection of permanent grasslands will support both carbon sequestration and grassland habitats.⁶⁴ Collectively these measures appear closely linked to the European Union's biodiversity target of maximising, by 2020, "areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity related measures under the CAP."⁶⁵ But there is a real possibility that their environmental impact would actually be limited.⁶⁶ The Commission has sought to identify "simple, generalised, non contractual and annual actions" that can be applied across the European Union.⁶⁷ However, environmental goals are best achieved by measures tailored to the environmental situation in individual areas.⁶⁸ The idea that these should be annual commitments also seems incompatible with the concept of ecological focus areas. Previous experience shows that greater environmental benefits are achieved when land is taken out of production over a longer term.⁶⁹ The proposals also leave farmers broad discretion in choosing the land to be set aside. It would be more

⁵⁰ See Commission, "Mid Term Review of the Common Agricultural Policy" COM (2002) 394, 23.

⁵¹ House of Commons Environment, Food and Rural Affairs Committee, 5th Report: *The Common Agricultural Policy After 2013*, HC 671-1, para. 181.

⁵² A. Buckwell *et al.*, "Towards a common agricultural and rural policy for Europe" [1997] 5 *European Economy*.

⁵³ Commission (n 37), Art. 29.

⁵⁴ *Ibid.*, Art. 30.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*, Art. 32.

⁵⁷ *Ibid.*, Art. 31.

⁵⁸ *Ibid.*, Art. 29(4).

⁵⁹ *Ibid.*, Art. 29(3).

⁶⁰ *Ibid.*, Art. 33(1).

⁶¹ *Ibid.*, Art. 29(5).

⁶² A. Matthews, "Greening the CAP: The Way Forward" (European Association of Agricultural Economists Seminar, Capri, 28 June 2012) <http://www.capreform.eu/paper-on-cap-greening/> last accessed 17 August 2012.

⁶³ Court of Auditors, "Opinion 1/2012 on certain proposals for regulations relating to the common agricultural policy for the period 2014 to 2020" para. 123.

⁶⁴ *Ibid.*, at p.3.

⁶⁵ See (n 35).

⁶⁶ See, House of Commons, Environment, Food and Rural Affairs Committee (n 51) para. 149.

⁶⁷ See Commission (n 37) at recital 26 to the draft regulation.

⁶⁸ K. Hart and D. Baldock, *Greening the CAP: Delivering Environmental Outcomes Through Pillar One* (IEEP, 2011), p. 6.

⁶⁹ See, OECD, *The Environmental Effects of Agricultural Land Diversion Schemes* (OECD, 1997).

Ecosystem Services and the Rural Environment

effective if the most ecologically valuable areas, rather than least agriculturally productive, were chosen. Equally, no provision is made to manage the ecological focus areas. Management obligations would provide greater support for biodiversity.⁷⁰ However, the need to tailor these obligations to local conditions conflicts with the Commission's desire to create simple, generalised measures.

Questions also arise concerning the protection of permanent grassland. Presently, Member States are required to ensure that the ratio of permanent grassland to their total agricultural area does not fall by more than ten per cent against the reference year 2003.⁷¹ The Court of Auditors calculates that this could correspond to a 30 per cent deduction in permanent grassland in some Member States.⁷² At farm level, farmers also currently have a cross-compliance obligation to protect permanent grasslands.⁷³ Cross-compliance is examined in the next section. However, it has been criticised as being poorly designed, implemented and enforced.⁷⁴ Under the greening component it would be compulsory to retain areas of permanent grassland from 2014. This creates the danger that farmers may elect to convert them to arable use before then. Even after 2014, the Commission's proposals would allow farmers to convert up to 5 per cent of their permanent grassland. In doing so, no protection is provided for species rich semi-natural grasslands. Given their lower agricultural productivity, semi-natural grasslands are at particular risk, of being converted to arable use or replaced by improved grasses, yet they provide particularly important support for farmland biodiversity.⁷⁵

Cross-compliance

Since 2003, cross-compliance has been the method used to link Single Farm Payments and Single Area Payments to compulsory environmental obligations.⁷⁶ Farmers receiving these payments must currently comply with statutory management requirements imposed by 18 regulations and directives dealing with environmental protection, public, animal and plant health and animal welfare.⁷⁷ They must also observe standards of good agricultural and environmental condition (the "GAEC standards") established by Member States under a common European Union framework.⁷⁸ The Commission envisages cross-compliance continuing to apply under its proposed basic payment.⁷⁹ This, however, would result in farmers being paid to deliver the mandatory greening components, whilst having to comply with other environmental conditions as cross-compliance obligations.

The Court of Auditors criticised the present statutory management requirements, arguing there was no objective reason why some measures were included and others excluded.⁸⁰ Thirty-eight statutory management requirements were initially proposed, but

they were reduced to the current 18 following discussions between the Commission and Member States.⁸¹ Five are directives concerned with environmental protection. They require compliance with obligations under the Wild Birds and Habitats Directives,⁸² the Sewage Sludge Directive,⁸³ the Groundwater Directive and the Nitrates Directive.⁸⁴ The Commission proposals would remove the Sewage Sludge Directive from this list. It protects soils from heavy metal contamination when sewage sludge is used as fertiliser. Its removal would be a retrograde step, when the importance of soil biodiversity, in supporting the provision of ecosystem services, has now been recognised.⁸⁵

The Commission's proposals would, however, plug evident gaps by including farmers' obligations under

⁷⁰ K. Hart and D. Baldock (n 68), p. 8.

⁷¹ See Commission Regulation 1122/2009 of 30 November 2009 laying down detailed rules for the implementation of cross-compliance, [2009] OJ L316/65, Art. 3. The reference date is 1st May 2004 for Member States who joined the EU in 2004 and 1st January 2007 for Bulgaria and Romania.

⁷² Court of Auditors, "Special Report 8/2008: Is Cross-Compliance an Effective Policy?" para. 36.

⁷³ See Reg. 73/2009 (n 36), Art. 6 and Annex III.

⁷⁴ Birdlife International, *Through the Green Smokescreen: How is CAP Cross-Compliance Delivering for Biodiversity?*, (Birdlife International, 2010), p. 36.

⁷⁵ See, for example, B. Green, "Agricultural Intensification and the Loss of Habitat, Species and Amenity in British Grasslands", [1990] 45 *Grass and Forage Science*, p.365.

⁷⁶ Under Council Regulation 1782/2003 of 29 September 2003 establishing common rules for direct payment schemes under the common agricultural policy, [2003] OJ L270/1, Article 5.

⁷⁷ See Reg. 73/2009 (n 36) Article 5 and Annex II.

⁷⁸ *Ibid*, Art. 6 and Annex III.

⁷⁹ Commission, "Proposal for a Regulation on the financing, management and monitoring of the common agricultural policy" COM (2011) 628 final/ 2, Art. 92.

⁸⁰ Court of Auditors (n 72) para. 16.

⁸¹ D. Bianchi, "Cross-Compliance: The New Frontier in Granting Subsidies to the Agricultural Sector in the European Union" (2006) 19 *Georgetown International Environmental Law Review*, 817 at p.822.

⁸² Directive 2009/147 of the European Parliament and of the Council on the conservation of wild birds, [2009] OJ L20/7 and Council Directive 92/43 on the conservation of natural habitats and of wild flora and fauna [1992] OJ L206/7.

⁸³ Council Directive 86/278 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture, [1986] OJ L181/6.

⁸⁴ Directive 2006/118 of the European Parliament and of the Council on the protection of groundwater against pollution caused by certain substances, [2006] OJ L372/19 and Council Directive 91/676 on the protection of waters against pollution caused by nitrates from agricultural sources, [1991] OJ L375/1.

⁸⁵ See, for example, EEA (n 26), p. 7.

Ecosystem Services and the Rural Environment

the Water Framework and Pesticides Directives.⁸⁶ However, they merely provide for the Commission to adopt delegated legislation to do so at some later date, once these Directives have been implemented by all Member States and the obligations that are directly applicable to farmers have been identified.⁸⁷ In practice, these objectives ought to have been met by January 2014, when the Commission's proposals for the CAP are intended to take effect. Member States were required to adopt national legislation to implement the Water Framework Directive, which also formed part of the *acquis communautaire* for new Member States, by 22nd December 2003.⁸⁸ They were similarly required to implement the Pesticides Directive by 14th December 2011.⁸⁹ This leaves the question of the practical implementation of each Directive's requirements. Member States are required to have programmes of measures in place by October 2012, to achieve the Water Framework Directive's water quality and water quantity goals.⁹⁰ Similarly, under the Pesticides Directive, they have until December 2012 to communicate national action plans to the Commission detailing the measures they will adopt to protect human health and the environment.⁹¹ This provides ample opportunity to identify the obligations imposed upon farmers before 1st January 2014. At most a twelve month delay should be provided before these cross-compliance obligations take effect.

The Commission's proposals continue to leave other legislative gaps in the statutory management requirements. For example, farmers must comply with the Waste Framework Directive.⁹² The Animal By-Products Regulation also regulates the disposal of animal carcasses and by-products.⁹³ Both measures protect soil and water based ecosystems. Additionally, the Environmental Impact Assessment Directive requires farmers to comply with the environmental impact assessment process before conducting farm restructuring, using uncultivated land or semi-natural land for intensive agriculture, instigating irrigation or land drainage projects, constructing intensive livestock installations or reclaiming land from the sea.⁹⁴ Equally, the Renewable Energy Directive prohibits the use of land with high biodiversity value in growing bio-fuel crops, whether this is primary forest and other wooded land, areas designated for nature conservation purposes or for the protection of rare, threatened or endangered ecosystems or species rich grasslands.⁹⁵ Extending the list of statutory management requirements to include these measures would impose no additional obligations upon farmers, it would, however, provide an additional means to ensure compliance.

The Commission's proposals would continue to require farmers to comply with GAEC standards as part of their cross-compliance obligations.⁹⁶ Eight standards are proposed, dealing with water quality and quantity, the protection of soils and of soil carbon and the retention and maintenance of landscape

features.⁹⁷ The obligation to maintain landscape features would re-introduce an existing GAEC standard, requiring farmers to retain hedges, ponds, ditches, trees, field margins and terraces. However, the Commission proposals are silent about its relationship to the proposed ecological focus areas. Unless these landscape features are excluded from ecological focus areas there is the possibility that farmers may be paid for retaining these features, as part of their ecological focus area, whilst simultaneously being under an obligation to do so through cross-compliance.⁹⁸

In total, six of the proposed GAEC standards replicate those currently in operation. These were criticised by the Court of Auditors, as not being formulated in a SMART (specific, measurable, achievable, relevant and timed) manner.⁹⁹ This criticism therefore remains equally valid of the proposed standards. The proposals also put forward two new standards. The first would require farmers to protect ground-waters from pollution. This is currently a statutory management requirement, requiring compliance with the Groundwater Directive.¹⁰⁰ The proposed change reflects the fact that this Directive will be repealed in December 2013 and ground-water protection incorporated within the Water Framework Directive. It retains the obligation to protect ground-

⁸⁶ Directive 2000/60 of the European Parliament and Council establishing a framework for Community action in the field of water policy, [2000] OJ L327/1 and Directive 2009/128 of the European Parliament and Council establishing a framework for Community action to achieve the sustainable use of pesticides [2009] OJ L309/71.

⁸⁷ See Commission (n 80) Article 93.

⁸⁸ (n 86), Art. 24(1).

⁸⁹ (n 86), Art. 23(1).

⁹⁰ (n 86), Art. 11.

⁹¹ (n 86), Art. 4.

⁹² Directive 2008/98 of the Council and European Parliament on waste, [2008] OJ L312/3. See Case C-62/03 *Commission v United Kingdom* [2004] All ER (D) 279, concerning its relevance to agriculture. Though the spreading of manure on farmland is not considered waste disposal, see Case C-416/02 *Commission v Spain* [2005] All ER (D) 65.

⁹³ Council Regulation 1774/2002 laying down health rules concerning animal by-products not intended for human consumption, [2002] OJ L273/1.

⁹⁴ Council Directive 2011/92 on the assessment of the effects of certain public and private projects on the environment [2011] OJ L26/1.

⁹⁵ Directive 2009/28 of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, [2009] OJ L140/16, Art. 17(3).

⁹⁶ Commission (n 79) Article 93 and Annex II.

⁹⁷ *Ibid.*

⁹⁸ See B. Allen *et al.*, *Maximising environmental benefits through ecological focus areas*, (IEEP, 2012), p.32.

⁹⁹ Court of Auditors (n.72) para. 13.

¹⁰⁰ Dir. 2006/118 (n 84).

Ecosystem Services and the Rural Environment

waters pending the introduction of a statutory management requirement concerning the Water Framework Directive.

The second new GAEC standard proposed requires farmers to protect wetlands and carbon rich soils. This recognises agriculture's role in carbon sequestration and in limiting carbon dioxide emissions. However, no measures are proposed regarding other green house gasses. Agriculture is the primary source of the European Union's nitrous oxide and methane emissions.¹⁰¹ Agricultural emissions of these gases did fall by 20 per cent between 1990 and 2007, due, respectively, to reductions in the use of organic and chemical fertilisers and to a drop in cattle numbers along with improvements in animal feed use.¹⁰² However, additional reductions in nitrous oxide emissions could be achieved if GAEC conditions required farmers to match fertilisation more closely with plant nutritional requirements. This would also protect farmland biodiversity from the toxic effects of fertilisation.¹⁰³ Farmers do have a cross-compliance obligation to comply with the fertilisation limits set by the Nitrates Directive.¹⁰⁴ However, these principally regulate those farming within Nitrate Vulnerable Zones or within Member States that introduced nitrate action plans throughout their territory. Unless the Commission has granted their Member State a derogation these farmers must limit fertilisation to a maximum of 170 kg of nitrogen per hectare.¹⁰⁵ Yet, even this may exceed the amount actually required.

The proposals would preclude Member States from introducing additional GAEC standards.¹⁰⁶ This promotes uniformity, but also prevents Member States from addressing other issues of particular national importance. However, in implementing the eight proposed standards, Member States would be required to take the specific characteristics of the area, "including its soil and climatic condition, existing farming systems, land use, crop rotation, farming practices and farm structures" into account.¹⁰⁷ This stops short of requiring Member States to conduct an assessment. In contrast, the European Union's biodiversity strategy provides for Member States to map and assess the state of ecosystems and their services by 2014.¹⁰⁸ Introducing a legislative requirement for Member States to conduct such an assessment, before developing their GAEC standards, would promote more effective national standards. A further weakness is that Commission approval would not be required before Member States put their GAEC standards into effect. The Court of Auditors criticised a similar vacuum within current GAEC standards.¹⁰⁹ Linking the need for Commission approval with an obligation to assess the state of ecosystems and their services could result in Member States being asked to demonstrate how the standards they had developed were adapted to the conditions found in this assessment.

Ultimately, it would be wrong to regard cross-

compliance as being uniformly applicable. Farmers engaged in horticulture, pig or poultry farming do not receive direct payments and are therefore not subject to cross-compliance.¹¹⁰ Even where it does apply, the Court of Auditors has questioned cross-compliance's effectiveness.¹¹¹ Critical observations have also been made by environmental non governmental organisations.¹¹² Collectively, these criticisms point to weaknesses in the implementation and enforcement of existing cross-compliance measures by Member States. Unfortunately, the Commission's proposals do little to address these weaknesses.

The Court of Auditors audited seven Member States and found none had fully translated all elements of cross-compliance into operational requirements.¹¹³ It found particular failings in the implementation of the Wild Birds, Habitats and Nitrates Directives and in translating their requirements into cross-compliance requirements at farm level.¹¹⁴ Elsewhere, weaknesses have also identified in the GAEC standards introduced by Member States.¹¹⁵ Alliance Environnement suggests many Member States failed to implement all of the required standards.¹¹⁶ Equally, Birdlife International concludes that those that had been adopted were often "translated into undemanding prescriptions, allowing common bad practice and permitting beneficiaries to derogate from requirements".¹¹⁷

Farm inspections requirements are also relatively limited. The Commission's implementing Regulation requires Member States to inspect at least one per cent of farmers claiming direct payments, to ensure they are

¹⁰¹ Commission, "The Role of European Agriculture in Climate Change Mitigation" SEC (2009)1093 final, p. 7.

¹⁰² *Ibid.*

¹⁰³ See, for example, C. Stevens *et al.*, "Impact of Nitrogen Deposition on Species Richness of Grasslands", [2004] 303 *Science* 1876.

¹⁰⁴ Dir. 91/676 (n 84).

¹⁰⁵ *Ibid.*, Article 5, Annex III.

¹⁰⁶ Commission (n 79) Article 94.

¹⁰⁷ *Ibid.*

¹⁰⁸ Commission (n 6), Target 2, Action 5.

¹⁰⁹ (n 72) para. 43.

¹¹⁰ Unless they receive natural handicap or agri-environment payments, which do entail meeting cross-compliance requirements.

¹¹¹ (n 72) para. 85.

¹¹² See, Birdlife International (n 74), Alliance Environnement, "Evaluation of the Application of Cross-Compliance as foreseen under Regulation 1782/2003 (Alliance Environnement, 2007), M. Farmer, V. Swales, "The Development and Implementation of Cross-Compliance in the EU-15: An Analysis" (IEEP, 2004).

¹¹³ (n 72). Based on an audit conducted in Finland, France, Greece, the Netherlands, Poland, Portugal and Slovenia.

¹¹⁴ *Ibid.*, paras. 22, 24 and 59.

¹¹⁵ Birdlife International (n 74), p. 23-39.

¹¹⁶ (n 112), p. xvii.

¹¹⁷ (n 74), p. 41.

Ecosystem Services and the Rural Environment

complying with cross-compliance conditions.¹¹⁸ A quarter of these are to be randomly selected, with the remainder chosen on the basis of a risk assessment.¹¹⁹ In practice, as a result of the better regulation agenda, the one per cent requirement has become the default standard. In contrast, Member States are required to inspect five per cent of farmers claiming direct payments, to ensure their continuing eligibility to receive these payments.¹²⁰ The disparity suggests the European Union attaches greater importance to its budget than to protecting the European environment.

At Member State level, the Commission has reported that 71 per cent of the non-compliance cases detected in 2005, within Member States applying full cross-compliance,¹²¹ concerned the identification and registration of cattle.¹²² Birdlife International argues this suggests that compliance with environmental legislation and with GAEC requirements, which are more complex and difficult to inspect, is being checked less thoroughly.¹²³ Member States currently retain only 25 per cent of the cross-compliance penalties they impose on farmers.¹²⁴ They therefore have little incentive to apply cross-compliance measures strictly against their own farmers. This conflict of interest would be enhanced under the current reform proposals, which provide for Member States to retain only 10 per cent of these monies.¹²⁵ An alternative approach would allow Member States to retain the monies withheld through cross-compliance penalties, on condition that they were used for spending upon rural development.

Even when a cross-compliance penalty is imposed, the amount involved may be small. Member States are required to distinguish between negligent and intentional non compliance. Where a farmer acts negligently, in committing a first breach of a cross-compliance requirement, the Regulation provides for a three per cent deduction to be made from their direct payments¹²⁶ However, Member States have discretion to decrease this to one per cent or increase it to five per cent, depending upon the severity, extent and permanence of the breach.¹²⁷ Alternatively, for minor technical breaches, a warning letter may instead be issued.¹²⁸ Where Member States detect a first intentional breach, payments should generally be reduced by 20 per cent, though Member States, again, have discretion to decrease this to 15 per cent or increase it to 100 per cent of the payments due.¹²⁹ In practice, the Commission reports that 68 per cent of payment deductions made in the EU-15 in 2005, and up to 98 per cent of those made in some Member States that year, were at the minimum one per cent level.¹³⁰ In many cases, the cost of compliance is much higher than the amount risked, through non compliance, in cross-compliance penalties.¹³¹ When combined with the low rate of inspection, this suggests that the risk to reward ratio often does not favour compliance. The Commission's proposals appear to accept, rather than seeking to address, this issue. They would remove the

current guideline reduction of three per cent, in cases involving a first negligent breach of cross-compliance. In its place, they merely stipulate that the percentage reduction in these cases shall not exceed five per cent.¹³²

Cross-compliance's effectiveness is further weakened by the fact that Member States currently have discretion not to apply cross-compliance penalties of €100 or less.¹³³ Instead, Member States are required to notify farmers of the breach and of their obligation to remedy it. Compliance is then checked on a sample of farms. Given Member States' preference for one per cent payment reductions, this potentially excludes many farmers from payment reductions. For example, sixty five per cent of the penalties imposed in Finland and 94 per cent of those imposed in Poland are below this level.¹³⁴ However, the Commission's reform proposals would continue this practice.¹³⁵ Cross-compliance penalties are not proportionate to the seriousness of the breach. Therefore these cases may include infringements with major implications for the environment and for ecosystem services. Limiting subsequent compliance checks to a sample means that these infringements may continue unabated. Admittedly, the risk rating of these farms, used in selecting those chosen for annual cross-compliance inspections, should be increased by the breach. However, the fact that only one per cent of farms are inspected again limits their chance of inspection.

The Commission's legislative proposals further weaken cross-compliance's regulatory impact by introducing a small farmer scheme. Farmers would be able to receive an annual payment under this scheme rather than receiving the basic payment.¹³⁶ Member States would set the amount of the payment, subject to certain conditions and to a minimum

¹¹⁸ Reg. 1122/2009 (n 71), Art. 50.

¹¹⁹ *Ibid.*

¹²⁰ *Ibid.*, Art. 30.

¹²¹ New Member States applying the Single Area Payment were initially required merely to include GAEC standards in their cross-compliance measures.

¹²² Commission, "Report on the Application of the System of Cross-Compliance" COM (2007) 147 final, p. 4.

¹²³ Birdlife International (n 74), p. 14.

¹²⁴ Reg. 73/2009 (n 36), Art. 25.

¹²⁵ Commission (n 79), Art. 100.

¹²⁶ Reg. 73/2009 (n 36), Art. 66(1).

¹²⁷ *Ibid.*

¹²⁸ *Ibid.*

¹²⁹ *Ibid.*, Art. 67(1).

¹³⁰ Commission (n 122), p. 4.

¹³¹ See Court of Auditors (n 72) para. 69.

¹³² Commission, (n 79), Art. 99(2).

¹³³ Reg. 1122/2009 (n 71), Art. 76.

¹³⁴ Court of Auditors (n 72) para. 74.

¹³⁵ Commission (n 79), Art. 97(3).

¹³⁶ Commission (n 37), Art. 47(1).

Ecosystem Services and the Rural Environment

ayment of €500 and a maximum of €1000.¹³⁷ Farmers who opt to receive it would then be exempt from the obligation to fulfil the greening component of the basic payment.¹³⁸ They would also be exempt from cross-compliance.¹³⁹ Although they would continue to be subject to the legislative measures making up the statutory management requirements, they would have no obligation to observe the GAEC standards. The Commission justifies this proposal in financial terms, as reducing Member States' administrative costs in managing and controlling direct payments.¹⁴⁰ However, the price is likely to be that large areas, of southern Europe in particular, would be removed from cross-compliance. This has particular relevance in view of cross-compliance's role as the principal tool protecting agricultural soils.

Four of the eight GAEC standards proposed by the Commission are concerned with soil protection. Little is really known about soil ecosystems.¹⁴¹ However, their role in supporting a range of ecosystem services is well recognised. These services include supporting the production of food and raw materials, sequestering carbon and filtering and transforming nutrients and water.¹⁴² Soil degradation remains a serious problem across the European Union. An estimated 115 million hectares of agricultural land are affected by water erosion and 42 million hectares by wind erosion.¹⁴³ Some 45 per cent of agricultural soils have low soil organic matter content, particularly in southern Europe and in parts of France, the United Kingdom and Germany.¹⁴⁴ The proposed small farmer scheme therefore risks excluding from cross-compliance some areas, of southern Europe in particular, where soil is most in need of protection. In 2006, the Commission's thematic strategy for soil suggested an alternative approach.¹⁴⁵ A key part of the strategy was the introduction of a soil framework directive.¹⁴⁶ Member States would have been required to identify areas suffering from soil degradation or that were at risk of doing so in future.¹⁴⁷ They would then have been required to introduce programmes of measures, setting both targets to address this issue and identifying appropriate measures to achieve them.¹⁴⁸ In addition to the inadequacies of cross compliance, the introduction of the small farmer scheme increases the urgency for such measures. However, six years after the Commission published its proposals, the Council has yet to agree upon the proposed directive. In the meantime soil degradation continues across the European Union.¹⁴⁹

Rural Development Policy

The environmental effects of agricultural intensification have not been universally experienced across the European Union. A combination of climatic conditions, poor land quality and social factors inhibited intensification in some areas. These areas may have

lower production capacities, but they often provide important support for farmland biodiversity. In particular, they help to maintain high nature value farmland. This land has been described as being characterised by extensive farming practices and by high species and habitat diversity or the presence of species of European conservation concern.¹⁵⁰ An estimated one third of farmland in the EU-27 is considered to be of high nature value, varying from 78 per cent of farmland in Slovenia to just 5 per cent in Denmark.¹⁵¹ Most are areas of semi-natural grasslands, farmed at low stocking densities with limited use of chemical fertilisers and pesticides.¹⁵² This management supports 28 of the habitats of European importance identified in the Habitats Directive.¹⁵³ However, with its limited agricultural capacity, this farmland is often associated with lower farm incomes. This in turn places the ecosystems it supports at risk from abandonment and intensification.¹⁵⁴

The European Union has sought to address these issues through its rural development policy. The policy is often referred to as being the second pillar of the CAP. However, it only accounts for 25 per cent of the European Union's spending on agriculture, with the remainder allocated to production policy.¹⁵⁵ This would also continue to be the case under the Commission's reform proposals.¹⁵⁶ Rural development

¹³⁷ *Ibid.*, Art. 49(2).

¹³⁸ *Ibid.*, Art. 47(3).

¹³⁹ Commission (n 79) Article 92.

¹⁴⁰ Commission (n 37) recital para. 38.

¹⁴¹ See, EEA (n 26), p. 4.

¹⁴² See EEA, *The European Environment: State and Outlook 2010- Soil*, (EEA, 2010), 4.

¹⁴³ Commission, "Thematic Strategy for Soil Protection", COM (2006) 231 final, p.3.

¹⁴⁴ *Ibid.*

¹⁴⁵ *Ibid.*, p. 5.

¹⁴⁶ Commission, "Proposal for a Directive Establishing a Framework for the Protection of Soil" COM (2006) 232 final.

¹⁴⁷ *Ibid.*, Art. 6(1).

¹⁴⁸ *Ibid.*, Art. 8(1).

¹⁴⁹ EEA (n 142), p. 30.

¹⁵⁰ EEA (n 27), p. 20.

¹⁵¹ M. Paracchini *et al.*, *High Nature Value Farmland in Europe: An estimate of distribution patterns on the basis of land cover and biodiversity data*, (Commission Joint Research Centre, 2008), p. 29.

¹⁵² T. Cooper *et al.*, *Provision of Public Goods Through Agriculture in the European Union*, (IEEP, 2009), p. 198.

¹⁵³ EEA, Report 1/2004 "High Nature Value Farmland: Characteristics, Trends and Policy Challenges", (EEA, 2004), p. 11.

¹⁵⁴ *Ibid.*, p. 7.

¹⁵⁵ See Commission (n 40) table 3.4.1.

¹⁵⁶ Commission (n 79), p.7, which suggests €317.2 billion would be allocated to production policy between 2014 and 2020 and €101.2 billion to rural development.

Ecosystem Services and the Rural Environment

policy is currently regulated by Regulation 1698/2005.¹⁵⁷ The Regulation required Member States to choose from a menu of 22 schemes in establishing their present rural development plans. These 22 schemes were divided into four axes, or groups. Of these, axis two contained those intended to enhance the environment and countryside. Within axis two, the natural handicap payments and the agri-environment-climate change scheme are of particular relevance for protecting ecosystem services. Collectively, the two schemes accounted for 46 per cent of the European Union's total rural development spending in 2010.¹⁵⁸ However, unlike the direct payments made under agricultural production policy, payments to farmers under these schemes are only partially underwritten by the European Union. It currently reimburses up to 80 per cent of eligible Member State expenditure in convergence areas, where GDP is below 75 per cent of the European Union average¹⁵⁹ and up to 55 per cent in other areas.¹⁶⁰

The Commission's reform proposals, whilst abolishing rural development's four axes, would retain both natural handicap payments and the agri-environment-climate change scheme. They would also increase the European Union's contribution to up to 85 per cent of eligible expenditure in convergence areas, but decrease it to up to 50 per cent elsewhere.¹⁶¹

Natural Handicap Payments

Natural handicap payments were introduced into European agricultural law in 1975.¹⁶² These payments, then known as "less favoured area payments" could be made to farmers in mountain areas and areas facing significant handicaps. The scheme's initial objectives were essentially socio-economic, the payments designed to discourage rural depopulation. These socio-economic origins are still visible in the criteria Member States were asked to apply in identifying areas currently affected by significant handicaps. They were required to be areas with low or dwindling populations predominantly dependent upon agriculture, where land was at risk of abandonment due to its poor agricultural quality and low productivity and where conservation of the countryside is necessary.¹⁶³

In total, 54 per cent of farmland in the European Union is currently eligible for natural handicap payments.¹⁶⁴ The Court of Auditors has criticised the fact that the Commission has insufficient evidence to substantiate the inclusion of many of these areas.¹⁶⁵ It was particularly critical of the identification of areas suffering from significant handicaps,¹⁶⁶ which account for almost two thirds of the land eligible for natural handicap payments.¹⁶⁷ The Court of Auditors also observed that Member States used a variety of indicators to identify areas that met the criteria for these areas, creating the risk that farmers in different Member States received unequal treatment.¹⁶⁸ In response, Regulation 1698/2005 proposed new bio-physical criteria to identify these areas.¹⁶⁹ These would

have placed emphasis upon locating areas with low soil productivity or unsuitable climatic conditions.¹⁷⁰ An additional environmental criterion was also proposed, requiring that the area was one in which it was important to maintain extensive farming activity in order to manage the land.¹⁷¹ However, Member States failed to agree upon common bio-physical criteria and, consequently, the pre-existing socio-economic criteria have continued in use.¹⁷²

Regulation 1698/2005 was part of a wider move to re-orientate the scheme towards environmental protection. The payments had initially been based upon livestock numbers. This encouraged environmental damage through overgrazing, as farmers increased stock to maximise their incomes.¹⁷³ Regulation 1257/99 therefore introduced the requirement that the payments should be based on farm area, rather than livestock numbers.¹⁷⁴ It also extended the categories of land eligible for payments. Member States were authorised to make the payments in areas affected by specific handicaps in which the continuation of farming was necessary to conserve or improve the environment, maintain the countryside and the area's tourist potential or protect the coastline.¹⁷⁵ However,

¹⁵⁷ [2005] OJ L277/1.

¹⁵⁸ Commission, "4th Financial Report to the Council and European Parliament on the European Agricultural Fund for Rural Development: 2010 Financial Year", COM (2011) 672 final, p.12.

¹⁵⁹ See Council Regulation 1083/2006 laying down provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, [2006] OJ L210/1.

¹⁶⁰ Reg. 1698/2005 (n 157), Art. 70(3).

¹⁶¹ Commission, "Proposal for a Regulation of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development", COM (2011) 627 final/2, Art. 65(3).

¹⁶² By Council Directive 75/268 on mountain and hill farming in agriculturally less favoured areas, [1975] OJ L128/1.

¹⁶³ Council Regulation 1257/99 on support for rural development from the European Agricultural Guidance and Guarantee Fund, [1999] OJ L160/80, Art. 19.

¹⁶⁴ European Commission (n 7), p. 141.

¹⁶⁵ Court of Auditors, "Special Report 4/2003 concerning rural development: support for less favoured areas", [2003] OJ C151/1, paras. 23-29.

¹⁶⁶ *Ibid.*

¹⁶⁷ European Commission, (n 7), p. 141.

¹⁶⁸ Court of Auditors (n 165) paras. 30-35.

¹⁶⁹ Art. 50(3) (a).

¹⁷⁰ *Ibid.*

¹⁷¹ *Ibid.*

¹⁷² See Commission, "Towards a better targeting of the aid to farmers in areas with natural handicaps", COM (2009) 161 final, 3.

¹⁷³ See B. Jack (n 8), p. 100.

¹⁷⁴ Reg. 1257/99 (n 163), Art. 14.

¹⁷⁵ *Ibid.*, Art. 20.

Ecosystem Services and the Rural Environment

lthough this introduced more environmentally focused criteria, these areas account for only four per cent of the total area currently receiving natural handicap payments.¹⁷⁶ More recently, Regulation 1698/2005 made it compulsory for claimants to meet the cross-compliance conditions examined earlier.¹⁷⁷ Additionally, by placing natural handicap payments into axis two of rural development policy, Regulation 1698/2005 also sought to reposition the scheme as an environmental measure. It was no longer simply concerned with promoting economic sustainability, but also now sought to support environmentally sustainable land management. The Commission's current reform proposals reiterate this objective. They describe the scheme as "contributing, by encouraging the continued use of agricultural land, to maintaining the countryside as well as to maintaining and promoting sustainable farming systems."¹⁷⁸ They also envisage that farmers receiving natural handicap payments would continue to be subject to cross-compliance commitments.¹⁷⁹

The Commission's reform proposals follow the completion of a review of the scheme.¹⁸⁰ They reiterate the current legal framework, in providing for natural handicap payments to be made to farmers in mountain areas, areas facing significant natural handicaps and areas affected by specific constraints.¹⁸¹ However, they again propose replacing the socio-economic criteria used to identify areas facing significant natural handicaps.¹⁸² The proposals envisage that these areas would instead be identified through a two step test.¹⁸³ Firstly, at least 66 per cent of the agricultural land in each area would have to meet at least one of nine biophysical indicators, concerned with the climate, soil conditions and the presence of steep terrain. Secondly, Member States would conduct a "fine tuning exercise" to exclude areas in which these natural constraints have been overcome through investment or economic activity.

The proposal for a fine tuning exercise acknowledges a key weakness in the current scheme. Subject to eligibility criteria, such as minimum farm size, every-one farming in areas identified as suffering from natural handicaps can obtain natural handicap payments. This includes those who have conducted farm improvements to overcome those handicaps, often with financial assistance from the European Union. However, since only 66 per cent of agricultural land in an area would have to meet the natural handicap criteria and since the "fine tuning exercise" would be conducted at an area, rather than farm, level this would continue to be an issue. The proposals also replicate the current situation in which extensive farms outside those identified as natural handicap areas are ineligible for support.

In reality, the scheme can only achieve the objective of supporting sustainable farming systems if eligibility is determined at farm level. The Commission's consultation document suggested two approaches by

which this might have been introduced.¹⁸⁴ Both would have added an additional, third, step to the selection process. On the one hand this would have required Member States to apply common criteria to ensure that, within the areas selected, payments were only made to farmers operating farms "in a manifestly environmentally sustainable manner". On the other hand, it would have resulted in only high nature value land in these areas being eligible. The Commission rejected this latter approach as Member States had yet to agree common indicators to identify high nature value land.¹⁸⁵ This runs contrary to the commitments the Member States gave in the 2003 Kiev Resolution on Biodiversity. European environment ministers agreed there to identify all high nature value areas within agricultural ecosystems by 2006 and to ensure that substantial proportions were receiving appropriate biodiversity sensitive management by 2008.¹⁸⁶ Their failure to honour this commitment reveals an alarming lack of impetus. However, as the Commission also concluded, limiting the scheme to high nature value land would also increase the risk of abandonment of other extensively managed farmland.¹⁸⁷ On the other hand, as the Commission also noted, limiting payments to those farming in a "manifestly environmentally sustainable manner" would have given an opportunity to target payments towards farms contributing most to sustainable land management. This, in particular, would have channelled payments to those farms making the most important contribution in supporting ecosystem services.

However, each of these alternatives would have broken the European Union's world trade commitments. Natural handicap payments constitute "regional assistance payments" under the terms of the 1994 Agriculture Agreement.¹⁸⁸ The Agreement provides for these payments to be made to farmers in

¹⁷⁶ Commission (n 7), p. 141.

¹⁷⁷ Reg. 1698/2005 (n 157), Art. 51.

¹⁷⁸ Commission (n 159) at recital 32 to the draft regulation.

¹⁷⁹ Commission (n 79), Art. 92.

¹⁸⁰ See Commission, "Review of the 'Less Favoured Area' Scheme" (Commission, 2008).

¹⁸¹ Commission (n 161), Art. 33(1).

¹⁸² *Ibid.*, Art. 33(3).

¹⁸³ *Ibid.*

¹⁸⁴ Commission (n 180), pp. 8-9.

¹⁸⁵ Commission, "Towards a better targeting of the aid to farmers in areas with natural handicaps: impact assessment", SEC (2009) 450, p. 17.

¹⁸⁶ United Nations Economic Commission for Europe, 5th Ministerial Conference, 21-23rd May 2003, Kiev Resolution on Biodiversity, ECE/CEP/108, Art. 2. http://www.unece.org/env/efe/historyofefe/history.en2011_5.htm Last accessed 17 August 2012.

¹⁸⁷ *Ibid.*

¹⁸⁸ 1994 Agriculture Agreement, http://www.wto.org/english/docs_e/legal_e/14-ag.pdf. Last accessed 17 August 2012.

Ecosystem Services and the Rural Environment

disadvantaged regions as long as certain conditions are met.¹⁸⁹ These require, *inter alia*, that disadvantaged regions are “clearly designated geographical area[s] with a definable administrative identity” and that they are considered disadvantaged on the basis of “neutral and objective criteria spelt out in law or regulation.” They also require that the payments should be limited to the extra costs or loss of income associated with farming the disadvantaged land and should generally be available to all farmers in the designated region.¹⁹⁰ The need to designate disadvantaged regions prevents any attempt to focus the scheme solely on extensive farming without geographic limitations. The designation criteria for disadvantaged lands emphasise agricultural disadvantage, rather than the environmental value of the area. This runs counter to any attempt to focus payments solely upon high nature value lands. Equally, the option of limiting the scheme to extensive farms would contravene the requirement that payments should be available to all farmers within designated areas. Collectively these obligations restrict the European Union in seeking to focus the scheme more fully upon less intensive land management.

The fact that payments are intended to reflect the impact natural handicaps have on farm incomes also limits the European Union’s flexibility in designing the scheme. As is currently also the case, the Commission proposals provide for Member States to set payment rates, within minimum and maximum parameters. The minimum annual payment is currently set at €25 per hectare and the maximum at €150 per hectare, or €250 in mountain areas.¹⁹¹ The Commission proposals leave the minimum payment unchanged, but suggest raising the maximum to €250 and €300 per hectare respectively.¹⁹² Actual payment levels vary widely across the European Union, with little correlation to the environmental importance of the land in question.¹⁹³ Slovenia and Finland are examples of Member States in which high payments coincide with the presence of large areas of high nature value land.¹⁹⁴ In contrast Spain maintains low payment rates despite also having large areas of high nature value land.¹⁹⁵ The scheme’s effectiveness is also limited by considerations of farm size. Unlike past national handicap schemes, the Commission’s proposals do not ask Member States to set minimum size thresholds for eligible farms. In some Member States, these thresholds resulted in the exclusion of large areas. In Spain and Italy, approximately half of all farms within areas identified as suffering from natural handicaps were excluded as they fell below eligibility thresholds of two and three hectares respectively.¹⁹⁶ However, even if these farms had been eligible, the payments made to individual farmers would have been low and likely to have had limited effect.¹⁹⁷ This, again, limits the contribution that natural handicap payments can make in protecting and supporting ecosystem services.

The Agri-Environment-Climate Change Scheme

The agri-environment-climate change scheme (“the agri-environment scheme” enables Member States to make payments to farmers providing environmental services. It is a compulsory element of rural development policy, which Member States must incorporate within their rural development programmes.¹⁹⁸ However, its scope and influence in each Member State will largely be determined by their willingness to provide matched funding. At farm level, the decision to take part is voluntary, with participating farmers entering contracts to provide environmental services over periods of between five and seven years.¹⁹⁹ However, they can only be paid for commitments that exceed their existing cross-compliance obligations.²⁰⁰ Each of these elements would remain unchanged under the Commission’s current legislative proposals.

However, the relationship between the agri-environment scheme and the greening component of the proposed basic payment is unclear. Under the Commission proposals, farmers taking part in agri-environment schemes would also have to comply with the greening component to be eligible for basic payments. The European Parliament has suggested that, as is proposed for organic farmers, they should be exempt from this requirement.²⁰¹ However, unless there is greater integration between the schemes, this could result in farmers being paid for the same environmental commitments under both the agri-environment scheme and the greening component. Additionally, the Commission’s proposals currently make no provision for farmers to provide environmental management, beyond their cross compliance commitments, on land implementing the greening component. One solution would be to require Member

¹⁸⁹ *Ibid.*, Annex 2, para. 13.

¹⁹⁰ *Ibid.*

¹⁹¹ Reg. 1698/2005 (n 157), Art.37 (3) and annex.

¹⁹² Commission (n 161), Art. 32(3) and annex I.

¹⁹³ EEA, Technical Report 12/2009: “Distribution and Targeting of the CAP Budget from a Biodiversity Perspective”, (EEA, 2009), p. 42.

¹⁹⁴ *Ibid.*

¹⁹⁵ *Ibid.* See also p. 55, concerning Spain’s Extremadura region.

¹⁹⁶ See T. Cooper *et al.*, An Evaluation of the Less Favoured Areas Measure in the 25 Member States of the European Union, (IEEP, 2006), 8.

¹⁹⁷ *Ibid.*

¹⁹⁸ Reg. 1698/2005 (n 157), Art. 39(1).

¹⁹⁹ *Ibid.*, Art. 39(3).

²⁰⁰ *Ibid.*

²⁰¹ European Parliament, Committee on Agriculture and Rural Development: Report on the proposal for a regulation of the European Parliament and of the Council establishing rules for direct payments to farmers within the framework of the common agricultural policy, 2011/0280(COD).

Ecosystem Services and the Rural Environment

States to incorporate the three elements of the greening component into their agri-environment schemes. Member States could be asked to develop management conditions for each element of the greening component as part of their agri-environment schemes. However, these management conditions would only apply to farmers participating in agri-environment schemes. A more effective solution would therefore be to require all farmers to meet basic management conditions in return for receiving greening component payments. Compatibility between the greening component and the agri-environment scheme could then be achieved by asking those participating in agri-environment schemes to provide additional, more demanding, management.

In practice, Member States enjoy broad discretion in designing agri-environmental schemes. They are merely required to do so “in accordance with their specific needs.”²⁰² The Commission’s legislative proposals would similarly provide for them to do so “in accordance with their national, regional or local specific needs and priorities.”²⁰³ At national level, the schemes fall into two categories. On the one hand, “broad and shallow” or “entry level” schemes seek to recruit as many farmers as possible. They generally offer low payments and require farmers to commit to relatively basic environmental obligations. On the other hand, “deep and narrow” or “higher level schemes” require farmers to make greater commitments in return for higher payments. Entry level schemes are more common, accounting for most of the expenditure incurred under the scheme.²⁰⁴

To be effective, agri-environment schemes must be well designed. Unfortunately, this has not always been achieved. The Court of Auditors recently audited agri-environment schemes in eight Member States.²⁰⁵ It found examples in Spain, Italy and France in which environmental pressures identified in Member States’ own rural development plans were not addressed within their agri-environment schemes.²⁰⁶ It also reported that in almost a quarter of the 203 agri-environment contracts it reviewed, the farming practices prescribed were based upon general belief that they would produce environmental benefits, rather than demonstrable evidence that they do.²⁰⁷ Additionally, the Court of Auditors found examples of farmers receiving agri-environment payments for practices they had already been applying. It pointed to beekeepers in Andalusia being paid to keep records they were already legally required to maintain and farmers in France being paid to reduce grassland fertilisation to 125kg of nitrate per hectare when they were using, on average, only 65 kg per hectare.²⁰⁸ Elsewhere, independent evaluations of national agri-environment schemes have also reported mixed results, in terms of achieving biodiversity protection.²⁰⁹

The Court of Auditors, in both its recent and previous reports,²¹⁰ has criticised Member States’ failure to target the agri-environment scheme towards

environmental priorities. This lack of targeting is also evident in the variations that occur in participation rates across the European Union. Twenty-one per cent of all farmland in the EU-27 is currently enrolled in the scheme.²¹¹ However, whilst 92 per cent of farmland in Luxembourg is enrolled, less than 10 per cent of farmland in Portugal, Cyprus, Malta, Romania, Lithuania, the Netherlands, Poland and Bulgaria is taking part.²¹² No relationship exists between the participation rate and the amount of high nature value land found in each Member State. The European Commission identifies ten Member States in which more than one third of farmland is considered to be of high nature value.²¹³ These are Bulgaria, Greece, Spain, Italy, Cyprus, Austria, Portugal, Romania, Slovenia and Finland. In five of those countries (Bulgaria, Greece, Cyprus, Portugal and Romania) ten per cent or less of farmland is enrolled within the agri-environment scheme.²¹⁴ Only Finland (90 per cent), Austria (70 per cent) and Slovenia (40 per cent) have high participation rates.²¹⁵ It might be suggested that the other Member States had adopted high level schemes, targeting land designated as Natura 2000 sites. However, low participation rates in Bulgaria, Greece and Portugal coincide with large areas (22 per cent, 19 per cent and 18 per cent respectively) of farmland identified as Natura 2000 sites.²¹⁶ Indeed, a study of 27 regions with significant areas of Natura 2000 agricultural habitats found no statistically significant relationship between this and rates of enrolment in the agri-environment scheme.²¹⁷

The Commission has acknowledged that “environ-

²⁰² Reg. 1698/2005 (n 157), Art. 39(1).

²⁰³ Commission (n 161), Art. 29(1).

²⁰⁴ Court of Auditors, Special Report 7/2011: Is Agri-Environment Support Well Designed and Managed?, para. 75.

²⁰⁵ Court of Auditors (n 204). The countries audited were Spain (concerning Andalusia), Italy (concerning Piedmont), Germany (concerning Berlin and Brandenburg), Sweden, Austria, Hungary, Poland and France.

²⁰⁶ *Ibid.*, para. 30.

²⁰⁷ *Ibid.*, para. 89.

²⁰⁸ *Ibid.*, paras. 60-61.

²⁰⁹ See D. Kleijn *et al.*, Mixed Biodiversity Benefits of Agri-Environment Schemes in Five European Countries, [2006] 9 *Ecology Letters* 243, D. Kleijn *et al.*, “How Effective are European agri-environment schemes in conserving and promoting biodiversity”, [2003] 40 *Journal of Applied Ecology* 947.

²¹⁰ Court of Auditors (n 204) paras. 74-75 and Special Report 14/2000: Greening the CAP.

²¹¹ Commission (n 7), p. 27.

²¹² *Ibid.*

²¹³ *Ibid.*, p. 159.

²¹⁴ *Ibid.*, p. 27.

²¹⁵ *Ibid.*

²¹⁶ *Ibid.*, p. 150.

²¹⁷ EEA (n 27), p. 49.

Ecosystem Services and the Rural Environment

mental measures should be more closely tailored to the specific needs of regions and even local areas such as Natura 2000 and [high nature value] areas.²¹⁸ However, its reform proposals contain no measures to achieve this goal. In practice, the agri-environment scheme needs to be harnessed to the European Union's biodiversity strategy. As noted previously, the strategy provides for Member States to map and assess the state of ecosystems and their services on their national territory by 2014.²¹⁹ In the same way that this assessment should inform the development of GAEC conditions, it ought also to provide the base from which Member States develop their agri-environment measures.

The proposed rural development regulation could assist this process by establishing a framework of core ecosystem services that should, unless demonstrably inapplicable, be supported in each agri-environment scheme. This would resemble the framework for GAEC conditions currently set out in Regulation 1782/2003. In lodging their rural development plans for approval by the Commission, Member States could then be asked to show how each had been addressed. The Commission's legislative proposals would also provide greater protection for ecosystem services if they required all Member States to ensure that effective higher level schemes were in place to support the management of high nature value areas or, at the very least, Natura 2000 sites. Additionally, Member States' agri-environment schemes currently focus principally upon maintaining existing environmental resources. In contrast, The European Union's biodiversity strategy seeks to restore at least 15 per cent of all degraded ecosystems by 2020.²²⁰ To achieve this target all agri-environment schemes must do more to promote capital projects. For example, peat-land restoration schemes have a valuable role in supporting carbon sequestration,²²¹ whilst wetland restoration promotes both nature conservation and flood prevention.²²²

This still leaves the problem posed by the wide variations in participation currently experienced across the European Union. Twenty-one per cent of farmland across the EU-27 may be enrolled in the scheme. However, 25 per cent of farmland in the EU-15 is participating and only 12 per cent across the newer Member States.²²³ There is a clear disparity between enrolment in the older EU-15 and in the twelve new Member States. There is also a north-south divide within the EU-15, with higher participation levels in northern Europe.²²⁴ As noted previously, Member States' willingness to provide matched funding for the scheme has been an important consideration.

In practice, the European Union has made relatively modest financial resources available to the scheme. One estimate suggests that the cost of securing appropriate environmental management on agricultural land across the EU-27 will reach €28 billion per

annum in 2020.²²⁵ In contrast, the European Union allocated €22 billion to the agri-environment scheme for the whole of its current rural development programme, from 2007 to 2013.²²⁶ This, again, brings into perspective the €33 billion spent annually on Single Farm Payments and Single Area Payments. The European Union currently uses compulsory modulation to divert some of this money into rural development spending. Member States are currently required to deduct 10 per cent of the payments due to farmers receiving more than €5,000 per annum in direct payments and 14 per cent from those receiving €300,000 or more.²²⁷ However, the Commission's legislative proposals would abolish compulsory modulation and instead give Member States discretion to transfer up to 10 per cent of the monies allocated to them for basic payments into their rural development budgets.²²⁸ Article 68 of Regulation 73/2009 presently gives Member States similar discretion to transfer monies from direct payments for a number of purposes, including agri-environment spending. However, few Member States have used it to support their agri-environment schemes.²²⁹ The Commission's proposed changes therefore seem likely to reduce the money available for agri-environment schemes.

Member States are also currently required to ensure that at least 25 per cent of European Union funds allocated to rural development are spent on axis two measures, which aim to improve the environment and countryside.²³⁰ Although axis two does contain other schemes, such as the natural handicap payment scheme, this provision does help to direct funds into the agri-environment scheme. The Commission's legislative proposals would replace the present mandatory spending provision with a simple statement in

²¹⁸ Commission (n 11), p. 10.

²¹⁹ Commission (n 6) Target 2, action 5.

²²⁰ *Ibid.*, Target 2.

²²¹ See, J. Waddington, K. Warner, "Atmospheric CO₂ Sequestration in Restored Mined Peatlands", [2001] 8 *Ecoscience* 359.

²²² See J. Morris *et al.*, "Watery Land: The Management of Lowland Floodplains in England", in M. Winter and M. Lobley, (Earthscan, 2009), p.135.

²²³ Commission (n 7), p. 27.

²²⁴ See, H. Buller, Regulation 2078: "Patterns of Implementation", in H. Buller, G Wilson and A. Höll (eds.) *Agri-environmental Policy in the European Union*, (Ashgate Publishing Ltd, 2000), p. 243.

²²⁵ K. Hart *et al.*, *Costing the Environmental Needs Related to Rural Land Management*, (IEEP, 2011), pp. 3-4.

²²⁶ Court of Auditors (n 204) 9.

²²⁷ Reg. 73/2009 (n 36), Art. 7.

²²⁸ Commission (n 37), Art. 14.

²²⁹ See Commission, "Implementation of Specific Support (Article 68 of Regulation 73/2009)" < <http://ec.europa.eu/agriculture/direct-support/pdf/implementation-specific-support.en.pdf> > Last Accessed 17 August 2012.

²³⁰ Reg. 1698/2005 (n 157), Art. 17.

Ecosystem Services and the Rural Environment

the preamble to the rural development regulation. This calls upon Member States to ensure that at least 25 per cent of rural development spending is allocated to the agri-environment, organic farming and natural handicap payment schemes.²³¹ As the Court of Auditors has pointed out,²³² this objective will only be achieved if it is included as a mandatory requirement within the body of the regulation itself.

The Court of Auditors previously recommended that the European Union should differentiate its agri-environment contributions, so that a higher contribution was made to those with greater potential to achieve lasting positive environmental effects.²³³ The management of high nature value farmland provides a case in point. The European Union's own strategic guidelines for rural development identify the preservation and development of high nature value farming systems and of traditional agricultural landscapes as an environmental priority.²³⁴ If this objective is to be achieved, it would appear essential for the European Union to provide greater funding for appropriate environmental management in these areas.

Questions also arise concerning the manner in which agri-environment payments are calculated. The Commission's legislative proposals repeat the current legislative position, prescribing maximum annual payments per hectare of €600 for annual crops, €900 for specialised perennial crops, €450 for other land uses and €200 for local breeding in danger of being lost to farming.²³⁵ They also repeat the current legislative requirement, that payments should be based upon the costs farmers incur and the income they forego through participating in the scheme.²³⁶ Member States must currently differentiate payments to take account of regional or sub-regional conditions and land use changes.²³⁷ Annual payments actually range from €600 per hectare in Malta and Cyprus to less than €100 per hectare in Romania, Poland, Bulgaria, Spain, France and the United Kingdom.²³⁸ Given the requirement to base payments on costs incurred and profits foregone, it is perhaps not surprising that studies show there to be no statistical link between payment levels and the amount of high nature value land or level of Natura 2000 sites found within each Member State.²³⁹ It might be suggested that, to some extent, the variations may reflect Member States' decisions to implement entry level or higher level schemes. However, commentators suggest that higher payments actually reflect a desire to support farm incomes, rather than compensate for income foregone.²⁴⁰ The Commission's legislative proposals seek to address this issue by requiring Member States to provide a certificate confirming the adequacy and accuracy of those calculations.²⁴¹ This would be issued by a body that had appropriate expertise and was independent of the authority that calculated the payments. This may help to ensure that future payments are based upon farmers' costs and profits foregone. It will not, however, address the

concern that this is an inappropriate method of calculation.

Calculating agri-environment payments on the basis of costs incurred and profits foregone as a result of entering the scheme values ecosystem services in agricultural production terms, rather than on their own merit. In contrast, areas with poor quality agricultural land often provide lower returns from agricultural production, but support many other ecosystem services. Their low agricultural quality is balanced by their higher environmental value. Farm abandonment is a major threat in these areas, precisely because of limited farm incomes. Natural handicap payments seek to compensate farmers for the limitations imposed by natural conditions. However, it appears counter intuitive to base agri-environment payments upon the scheme's impact on farm incomes. On the most economically marginal farms, in particular, farmers may have little to compensate in terms of income foregone.²⁴² In contrast, the agri-environment scheme would be more effective if the payments were based upon the value of the farmers' role in protecting ecosystem services.

Such a change, however, would contravene the European Union's world trade commitments, under the 1994 Agriculture Agreement. It provides that payments under agri-environmental programmes will only be exempt from obligations to reduce domestic support if they are limited to the extra costs or loss of income involved in complying with those programmes.²⁴³ This requirement appears out of step with the international community's objective of

²³¹ Commission (n 161) recital 28.

²³² Court of Auditors (n 63) para. 178.

²³³ Court of Auditors (n 204) para. 98.

²³⁴ Council Decision of 20 February 2006 on Community strategic guidelines for rural development, [2006] OJ L55/20, para. 3.2.

²³⁵ See, respectively, Commission (n 161) annex 1 and Reg. 1698/2005 (n 157) annex.

²³⁶ Reg. 1698/2005 (n 157), Art. 39(4).

²³⁷ See Commission Regulation 1974/2006 setting down rules for the implementation of the Rural Development Regulation, [2006] OJ L368/15, Art. 53.

²³⁸ Commission (n 7), p. 32.

²³⁹ In relation to high nature value land see EEA (n 193) p 41 and for Natura 2000 see EEA (n 27), p. 48.

²⁴⁰ See P. Dupraz *et al.*, "Nature Conservation and Production", in A. Oskam *et al.* (eds.) *EU Policy for Agriculture, Food and Rural Areas* (Wageningen Academic Publishers, 2010), p.358.

²⁴¹ Commission (n 161), Art. 69(2).

²⁴² R. Schrijver, *et al.*, "Compensation or Conservation Payments for Farmers? Exploring Opportunities for Agri-environmental Schemes in the Netherlands", in F. Brouwer and C. van der Heide, *Multifunctional Rural Land Management*, (Earthscan, 2009), p. 177.

²⁴³ 1994 Agriculture Agreement (n 188) Annex 2, para. 12(b).

Ecosystem Services and the Rural Environment

ensuring that ecosystems supplying essential services are restored and safeguarded by 2020. Various methods have been developed to assess the value of landowners' work in protecting ecosystem services. These include stated preference approaches, measuring peoples' preparedness to pay for those services, and cost based methods, based upon the cost of replacing them.²⁴⁴ The task of valuing landowners work in protecting a basket of ecosystem services is by no means straightforward. However, the process must begin by recognising that it may be significantly higher than the amount involved in simply compensating for lost production.

Conclusion

The concept of ecosystem services has become embedded within international and European Union environmental policy in recent years. Additionally, the need for urgent action has also become clear. The reform of the CAP provides the European Union with an opportunity to take such action within a core policy which, in the past, often encouraged the very damage it is now seeking to prevent. However, the Commission's proposals stop short of providing effective support for the European Union's objective of halting biodiversity loss and the degradation of ecosystem services by 2020.

The proposals continue to give direct payments a central role within agricultural production policy. However, their suggestion of a greening component is a poor substitute for payments for ecosystem services. In particular, in suggesting that farmers' commitments under the greening component should be simple, generalised, non-contractual and annual, the Commission overlooks important lessons from

previous environmental measures. Equally, although they entrench its continuation, the proposals stop short of promoting the types of reform necessary to make compulsory cross compliance effective. Indeed the introduction of the small farmer scheme seems likely to have the opposite effect. The proposals for this scheme also highlight the need for urgent action in introducing the much delayed soil framework directive.

Natural handicap payments and the agri-environment scheme would again be the principal rural development schemes supporting the rural environment. The obligation to comply with world trade commitments concerning agriculture limits the European Union's ability to refashion each of these schemes in ways that would be more supportive of ecosystem services. However, both schemes would complement each other in compensating farmers for the income restrictions caused by poor farming conditions and in complying with environmental management commitments. Unfortunately, the same cannot be said of the relationship between the agri-environment scheme and the greening component of the proposed basic payment. Equally, if it is to make a truly effective contribution towards protecting ecosystem services, the European Union must develop a more structured legislative framework for the scheme and address the problem of its uneven implementation across Member States. The scheme must, at least, become a fundamental vehicle for supporting the management of high nature value land in all Member States.

²⁴⁴ See European Academies Science Advisory Council (n 5), p. 21.